ABSTRACT

A power converter according to the invention that can continue to operate after suffering a partial failure. The power converter includes multiple array transformers; normally-on switches connected respectively in series with the ends of each of the primary windings of the array transformers; normally-off current bypass devices connected in parallel with the series connections of the primary windings of the array transformers and the switches at their ends; AC-DC converter units having their AC sides connected respectively to each of the secondary windings of the array transformers; and mutually independent DC circuits severally connected to the DC sides of the AC-DC converter units. By turning on the current bypass device of the primary winding of a specified array transformer and turning off the switches at the ends of that primary winding it is possible to isolate the specified array transformer and the AC-DC converter unit connected to it.